CLAIMS

What is claimed is:

1.   A pneumatic tire comprising a tread and shoulders adjacent the tread, the tread comprising a central region and a pair of opposing side regions, the tread further comprising a circumferentially extending rib in the central region, and a plurality of steeply slanted grooves inclined at an angle relative to the circumferential direction of the tire in each side region,

   the rib having a plurality of sipes extending across the full width of the rib, the sipes having a density of 2 to 8 sipes per inch (0.78-3.15 sipes per cm), and

   the steeply slanted grooves in each side region initiate at the junction of the central region and the side regions and terminate in the shoulders, forming circumferentially adjacent tread blocks, the blocks extending from the central region to the shoulders, and having a plurality of sipes, the spacing between adjacent sipes increasing toward the tread shoulders,

   wherein the tread has a greater sipe density in the central region of the tire than in the side regions.

2.   The tire of claim 1 wherein the lateral edges of the rib have a plurality of laterally extending edges and circumferentially extending edges, the laterally extending edges on each side of the rib being circumferentially offset from the laterally extending edges on the opposing side of the ribs.

3.   The tire of claim 2 wherein extending from the laterally oriented edges of the rib, and along the lateral edge of the rib, is a chamfer that decreases in width from the laterally oriented edge to the circumferentially adjacent laterally oriented edge.

4.   The tire of claim 3 wherein the radial height of the rib chamfer gradually decreases from the laterally oriented edge to the circumferentially adjacent laterally oriented edge.

5.   The tire of claim 3 wherein the sipes in the tread rib extend into the chamfer.

6.   The tire of claim 1 wherein the sipes in the tread rib are comprised of at least two inclined portions.

7.   The tire of claim 1 wherein the sipes in the blocks are oriented perpendicular to the steeply slanted grooves.

8.   The tire of claim 1 wherein the sipes in the tread rib have two sections formed of portions inclined at equal but opposing angles and the sipes in the blocks are inclined in the same direction as the most adjacent sipe portion in the tread rib.

9.   The tire of claim 1 wherein the steeply slanted grooves have a non-constant width as the grooves extend from the central region to the shoulders, the grooves having a maximum width in the central 15% of each side region of the tread.

10.   The tire of claim 9 wherein the grooves have a maximum width of at least 1.5 times the minimum groove width of the steeply slanted grooves.

11.   The tire of claim 1 wherein the sipes in the axially outermost 25% of each side region extend into the tread shoulders.

12.   The tire of claim 11 wherein each sipe extending into the shoulder has a wide and a narrow width portion such that the wide width portion of each sipe in a single block is circumferentially adjacent to a narrow width portion of the adjacent block.

13.   The tire of claim 1 wherein at the axially inner portion of the block, the block has a sipe density of 1 to 5 sipes per inch (0.393 - 1.97 sipes/cm) and at the axially outer portion of the block, the block has a sipe density of 0.5 to 3 sipes per inch (0.2 to 1.18 sipes/cm).

14. The tire of claim 1 wherein the net-to-gross ratio of the tire decreases from the tread edge toward the tread center, with a maximum net-to-gross ratio at the equatorial plane of the tire.